

AMENDMENTS TO THE CLAIMS

Please cancel Claims 24-36 and 46-61, without prejudice.

Please amend Claims 37 and 44 as follows.

1-36 (Cancelled)

37. (Currently amended) A contact node comprising:

at least two metallized contacts coupled with first and second conductive paths arranged on surfaces of under-lying and upper-lying connection layers, respectively, made on the base of a dielectric material and mutually aligned and interconnected electrically and mechanically by conductive binding material, wherein it is made in the form of joint between a contact made in the form of metallized contact pad coupled with the second conductive path on the surface of the under-lying connection layer, and a respective contact jointed with said contact pad via conductive binding material and made in the form of a metallized hole through the upper-lying connection layer, the metallized hole having an inner surface thereof connected to the first conductive path, the lower edge of the metallized hole being faced to the metallized contact pad on the surface of the under-lying connection layer. The contact node according to Claim 24, wherein a contact made in the form of a rod fixed in the under-lying connection layer orthogonally to its surface is inserted into the metallized hole.

38. (Previously presented) The contact node according to Claim 37, wherein the rod has the form of cylinder.

39. (Previously presented) The contact node according to Claim 37, wherein the rod has the form of polygon.

40. (Previously presented) The contact node according to Claim 37, wherein grooves are made along the generatrix of the rod.

41. (Previously presented) The contact node according to Claim 40, wherein the grooves are made interrupted.

42. (Previously presented) The contact node according to Claim 37, wherein the rod is made from a conductive material.

43. (Previously presented) The contact node according to Claim 37, wherein the rod is made from an electrical insulating material with a conductive coating.

44. (Currently amended) The contact node according to Claim 2837, wherein the metallized hole is made in the form of a truncated cone, the lesser base of the truncated cones being faced to the contact pad on the surface of the under-lying connection layer, and the greater base of the truncated cones being coupled with the first conductive path on the upper surface of the upper-lying connection layer, wherein the upper edge of the metallized hole coupled with the first conductive path on the surface of the upper-lying connection layer is made with a metallized rim along the periphery of the edge, and wherein the diameter D of the greater base of the truncated cone, the width h of the metallized rim, the diameter d of the lesser base of the truncated cone, the thickness t of the dielectric material of the connection layer and the minimal width L of the respective metallized contact pad on the underlying connection layer are coupled with the following relationship:

$$L \geq D + 2h = d + 2t + 2h$$

45. (Previously presented) The contact node according to Claim 37, wherein the upper edge of the metallized hole coupled with the first conductive path and a lower edge of the metallized hole are made with metallized rims on the surfaces of the under-lying connection layer along the periphery of the edges.

46-61. (Cancelled)